

SEQUENCE LISTING

<110> Wood, Clive Chaudhary, Divya Long, Andrew Genetics Institute, Inc. <120> TRADE MOLECULES, AND USES RELATED THERETO <130> 22058-569 <140> 09/780,532 <141> 2001-02-09 <150> 60/181,922 <151> 2000-02-11 <150> 60/182,148 <151> 2000-02-14 <160> 24 <170> PatentIn Ver. 2.1 <210> 1 <211> 1660 <212> DNA <213> Homo sapiens <220> <221> CDS <222> (1)..(1251) <400> 1 atg gct tta aaa gtg cta cta gaa caa gag aaa acg ttt ttc act ctt 48 Met Ala Leu Lys Val Leu Leu Glu Glu Glu Lys Thr Phe Phe Thr Leu tta gta tta cta ggc tat ttg tca tgt aaa gtg act tgt gaa tca gga Leu Val Leu Leu Gly Tyr Leu Ser Cys Lys Val Thr Cys Glu Ser Gly 30 20 25 gac tgt aga cag caa gaa ttc agg gat cgg tct gga aac tgt gtt ccc 144 Asp Cys Arg Gln Gln Glu Phe Arg Asp Arg Ser Gly Asn Cys Val Pro 35 40 45 tgc aac cag tgt ggg cca ggc atg gag ttg tct aag gaa tgt ggc ttc 192 Cys Asn Gln Cys Gly Pro Gly Met Glu Leu Ser Lys Glu Cys Gly Phe 50 55 ggc tat ggg gag gat gca cag tgt gtg acg tgc cgg ctg cac agg ttc 240 Gly Tyr Gly Glu Asp Ala Gln Cys Val Thr Cys Arg Leu His Arg Phe 65 75 80 70 aag gag gac tgg ggc ttc cag aaa tgc aag ccc tgt ctg gac tgc gca 288 Lys Glu Asp Trp Gly Phe Gln Lys Cys Lys Pro Cys Leu Asp Cys Ala 90 95 85

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			_	cac His	_		_	_	_			_		_	_		480
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				cag Gln													672
			_	gaa Glu		_		_	_		_		_	_			720
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gct Ala	taaa	agaa	cct (gctto	cttt	ct go	cagta	agaa	g cgt	tgtg	ctgg	aaco	ccaa	aga		1301
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Cys Asn Gln Cys Gly Pro Gly Met Glu Leu Ser Lys Glu Cys Gly Phe 50 60

Gly Tyr Gly Glu Asp Ala Gln Cys Val Thr Cys Arg Leu His Arg Phe Lys Glu Asp Trp Gly Phe Gln Lys Cys Lys Pro Cys Leu Asp Cys Ala Val Val Asn Arg Phe Gln Lys Ala Asn Cys Ser Ala Thr Ser Asp Ala Ile Cys Gly Asp Cys Leu Pro Gly Phe Tyr Arg Lys Thr Lys Leu Val Gly Phe Gln Asp Met Glu Cys Val Pro Cys Gly Asp Pro Pro Pro Tyr Glu Pro His Cys Ala Ser Lys Val Asn Leu Val Lys Ile Ala Ser Thr Ala Ser Ser Pro Arg Asp Thr Ala Leu Ala Ala Val Ile Cys Ser Ala Leu Ala Thr Val Leu Leu Ala Leu Leu Ile Leu Cys Val Ile Tyr Cys Lys Arg Gln Phe Met Glu Lys Lys Pro Ser Trp Ser Leu Arg Ser Gln Asp Ile Gln Tyr Asn Gly Ser Glu Leu Ser Cys Phe Asp Arg Pro Gln Leu His Glu Tyr Ala His Arg Ala Cys Cys Gln Cys Arg Arg Asp Ser Val Gln Thr Cys Gly Pro Val Arg Leu Leu Pro Ser Met Cys Cys Glu Glu Ala Cys Ser Pro Asn Pro Ala Thr Leu Gly Cys Gly Val His Ser Ala Ala Ser Leu Gln Ala Arg Asn Ala Gly Pro Ala Gly Glu Met Val Pro Thr Phe Phe Gly Ser Leu Thr Gln Ser Ile Cys Gly Glu Phe Ser Asp Ala Trp Pro Leu Met Gln Asn Pro Met Gly Gly Asp Asn Ile Ser Phe Cys Asp Ser Tyr Pro Glu Leu Thr Gly Glu Asp Ile His Ser Leu Asn Pro Glu Leu Glu Ser Ser Thr Ser Leu Asp Ser Asn Ser Ser Gln Asp Leu Val Gly Gly Ala Val Pro Val Gln Ser His Ser Glu Asn

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Phe Thr Ala Ala Thr Asp Leu Ser Arg Tyr Asn Asn Thr Leu Val Glu

380

375

370

432

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_	_	_			atg Met											624
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_			_		gcc Ala 230		_	_	_	_	_	_	_	_	_	720
	_	_			ggg Gly		_									768
					ccc Pro											816
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	_				gga Gly			_	_			_		_		912
	_	_			ctg Leu 310	_	_			_			_			960
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Asp	Cys	Arg 35	Gln	Gln	Glu	Phe	Arg 40	Asp	Arg	Ser	Gly	Asn 45	Cys	Val	Pro	
Cys	Asn 50	Gln	Cys	Gly	Pro	Gly 55	Met	Glu	Leu	Ser	Lys 60	Glu	Сув	Gly	Phe	
Gly 65	Tyr	Gly	Glu	Asp	Ala 70	Gln	Cys	Val	Thr	Cys 75	Arg	Leu	His	Arg	Phe 80	
Lys	Glu	Asp	Trp	Gly 85	Phe	Gln	Lys	Cys	Lys 90	Pro	Cys	Leu	Asp	Cys 95	Ala	
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Gly	Phe 130	Gln	Asp	Met	Glu	Cys 135	Val	Pro	Cys	Gly	Asp 140	Pro	Pro	Pro	Pro	
	_				_				_	_		_		- -	_	

Tyr Glu Pro His Cys Ala Ser Lys Val Asn Leu Val Lys Ile Ala Ser

Thr Ala Ser Ser Pro Arg Asp Thr Ala Leu Ala Ala Val Ile Cys Ser 165 170 175

Ala Leu Ala Thr Val Leu Leu Ala Leu Leu Ile Leu Cys Val Ile Tyr 180 185 190

Cys Lys Arg Gln Phe Met Glu Lys Lys Pro Ser Trp Ser Leu Arg Ser 195 200 205

Gln Asp Ile Gln Tyr Asn Gly Ser Glu Leu Ser Cys Leu Asp Arg Pro 210 215 220

Gln Leu His Glu Tyr Ala His Arg Ala Cys Cys Gln Cys Arg Arg Asp 225 230 235 240

Ser Val Gln Thr Cys Gly Pro Val Arg Leu Leu Pro Ser Met Cys Cys 245 250 255

Glu Glu Ala Cys Ser Pro Asn Pro Ala Thr Leu Gly Cys Gly Val His 260 265 270

Ser Ala Ala Ser Leu Gln Ala Arg Asn Ala Gly Pro Ala Gly Glu Met 275 280 285

Val Pro Thr Phe Phe Gly Ser Leu Thr Gln Ser Ile Cys Gly Glu Phe 290 295 300

Ser Asp Ala Trp Pro Leu Met Gln Asn Pro Met Gly Gly Asp Asn Ile 305 310 315 320

Ser Phe Cys Asp Ser Tyr Pro Glu Leu Ala Gly Glu Asp Ile His Ser 325 330 335

Leu Asn Pro Glu Leu Glu Ser Ser Thr Ser Leu Asp Ser Asn Ser Ser 340 345 350

Gln Asp Leu Val Gly Gly Ala Val Pro Val Gln Ser His Ser Glu Asn 355 360 365

Phe Thr Ala Ala Thr Asp Leu Ser Arg Tyr Asn Asn Thr Leu Val Glu 370 375 380

Ser Ala Ser Thr Gln Asp Ala Leu Thr Met Arg Ser Gln Leu Asp Gln 385 390 395 400

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tct ccc act Ser Pro Thr 275	Thr Leu				_	_	_	864
atg cca gcc Met Pro Ala 290			Val Ser					912
tct gat gcc Ser Asp Ala 305					_			960
ctc tgt gac Leu Cys Asp		Pro Glu			_			1008
aat ccc gaa Asn Pro Glu	_		_	Leu Asp	Ser Ser			1056
gat ctg gct Asp Leu Ala 355	Gly Thr							1104
tct act gad Ser Thr Asp 370					_			1152
acg cta gct Thr Leu Ala 385	_					_	_	1200
gac agg gaa Asp Arg Glu	_	Asn Leu			_		_	1248
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Cys Lys Gln Cys Gly Pro Gly Met Glu Leu Ser Lys Glu Cys Gly Phe 50 55 60

Gly Tyr Gly Glu Asp Ala Gln Cys Val Pro Cys Arg Pro His Arg Phe
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Lys Glu Asp Trp Gly Phe Gln Lys Cys Lys Pro Cys Ala Asp Cys Ala 85 90 95

Leu Val Asn Arg Phe Gln Arg Ala Asn Cys Ser His Thr Ser Asp Ala 100 105 110

Val Cys Gly Asp Cys Leu Pro Gly Phe Tyr Arg Lys Thr Lys Leu Val 115 120 125

Gly Phe Gln Asp Met Glu Cys Val Pro Cys Gly Asp Pro Pro Pro Pro 130 135 140

Tyr Glu Pro His Cys Thr Ser Lys Val Asn Leu Val Lys Ile Ser Ser 145 150 155 160

Thr Val Ser Ser Pro Arg Asp Thr Ala Leu Ala Ala Val Ile Cys Ser

165 170 175

Gln Asp Ile Gln Tyr Asn Gly Ser Glu Leu Ser Cys Phe Asp Gln Pro 210 215 220

Arg Leu Arg His Cys Ala His Arg Ala Cys Cys Gln Tyr His Arg Asp 225 230 235 240

Ser Ala Pro Met Tyr Gly Pro Val His Leu Ile Pro Ser Leu Cys Cys 255

Glu Glu Ala Arg Ser Ser Ala Arg Ala Val Leu Gly Cys Gly Leu Arg 260 265 270

Ser Pro Thr Thr Leu Gln Glu Arg Asn Pro Ala Ser Val Gly Asp Thr 275 280 285

Met Pro Ala Phe Phe Gly Ser Val Ser Arg Ser Ile Cys Ala Glu Phe 290 295 300

Ser Asp Ala Trp Pro Leu Met Gln Asn Pro Leu Gly Gly Asp Ser Ser 305 310 315 320

Leu Cys Asp Ser Tyr Pro Glu Leu Thr Gly Glu Asp Thr Asn Ser Leu 325 330 335

Asn Pro Glu Asn Glu Ser Ala Ala Ser Leu Asp Ser Ser Gly Gly Gln 340 345 350

Asp Leu Ala Gly Thr Ala Ala Leu Glu Ser Ser Gly Asn Val Ser Glu 355 360 365

Ser Thr Asp Ser Pro Arg His Gly Asp Thr Gly Thr Val Trp Glu Gln 370 380

Thr Leu Ala Gln Asp Ala Gln Arg Thr Pro Ser Gln Gly Gly Trp Glu 385 390 395 400

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Gly Tyr Gly Glu Asp Ala Gln Cys Val Thr Cys Arg Leu His Arg Phe
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Lys Glu Asp Trp Gly Phe Gln Lys Cys Lys Pro Cys Leu Asp Cys Ala
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35

120

115

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<213> Homo sapiens

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35 40 45

Cys Asn Gln Cys Gly Pro Gly Met Glu Leu Ser Lys Glu Cys Gly Phe 50 60

Gly Tyr Gly Glu Asp Ala Gln Cys Val Ala Cys Arg Leu His Arg Phe 65 70 75 80

Lys Glu Asp Trp Gly Phe Gln Lys Cys Lys Pro Cys Leu Asp Cys Ala 85 90 95

Val Val Asn Arg Phe Gln Lys Ala Asn Cys Ser Ala Thr Ser Asp Ala 100 105 110

Ile Cys Gly Asp Cys Leu Pro Gly Phe Tyr Arg Lys Thr Lys Leu Val

Gly Phe Gln Asp Met Glu Cys Val Pro Cys Gly Asp Pro Pro Pro Pro 130 135 140

Tyr Glu Pro His Cys Ala Ser Lys Val Asn Leu Val Lys Ile Ala Ser 145 150 155 160

Thr Ala Ser Ser Pro Arg Asp Thr Ala Leu Ala Ala Val Ile Cys Ser 165 170 175

Ala Leu Ala Thr Val Leu Leu Ala Leu Leu Ile Leu Cys Val Ile Tyr 180 185 190

Cys Lys Arg Gln Phe Met Glu Lys Lys Pro Ser Trp Ser Leu Arg Ser 195 200 205

Gln Asp Ile Gln Tyr Asn Glu Ser Glu Leu Ser Cys Phe Asp Arg Pro 210 215 220

Gln Leu His Glu Tyr Ala His Arg Ala Cys Cys Gln Cys Arg Arg Asp 225 230 235 240

Ser Val Gln Thr Cys Gly Pro Val Arg Leu Leu Pro Ser Met Cys Cys 245 250 255

Glu Glu Ala Cys Ser Pro Asn Pro Ala Thr Leu Gly Cys Gly Val His

260 265 270

Ser Ala Ala Ser Leu Gln Ala Arg Asn Ala Gly Pro Ala Gly Glu Met 275 280 285

Val Pro Thr Phe Phe Gly Ser Leu Thr Gln Ser Ile Cys Gly Glu Phe 290 295 300

Ser Asp Ala Trp Pro Leu Met Gln Asn Pro Met Gly Gly Asp Asn Ile 305 310 315 320

Ser Phe Cys Asp Ser Tyr Pro Glu Leu Thr Gly Glu Asp Ile His Ser 325 330 335

Leu Asn Pro Glu Leu Glu Ser Ser Thr Ser Leu Asp Ser Asn Ser Ser 340 345 350

Gln Asp Leu Val Gly Gly Ala Val Pro Val Gln Ser His Ser Glu Asn 355 360 365

Phe Thr Ala Ala Thr Asp Leu Ser Arg Tyr Asn Asn Thr Leu Val Glu 370 385

Ser Ala Ser Thr Gln Asp Ala Leu Thr Met Arg Ser Gln Leu Asp Gln 385 390 395 400

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<213> Artificial Sequence

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<223> Description of Artificial Sequence:Consensus sequence

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40
45

Cys Asn Gln Cys Gly Pro Gly Met Glu Leu Ser Lys Glu Cys Gly Phe 50 60

Gly Tyr Gly Glu Asp Ala Gln Cys Val Thr Cys Arg Leu His Arg Phe
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Carrand